IE 424 - Scheduling
Fall 2025

Instructor: Prof. Dr. Ömer Kırca

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Assistant:

Course material: *ODTÜclass*   **Lectures:** 13.40-16:30

Prerequisite: IE324 or equivalent

Text*:
[1] K. R. Baker and Dan Trietsch, *Principles of Sequencing and Scheduling*, Wiley, 2009
[2] M. Pinedo, *Scheduling: Theory, Algorithms, and Systems*, Springer, 2008
[3} some papers
will be provided through ODTÜClass

References:
1. D. R. Sule, *Industrial Scheduling*, PWS, 1997
2. T. E. Morton and D. W. Pentico, *Heuristic Scheduling Systems with Applications to Production Systems and Project Management*, Wiley, 1993
3. K. R. Baker, *Introduction to Sequencing and Scheduling*, Wiley, 1974
4. K. R. Baker, *Elements of Sequencing and Scheduling*, class notes, 1995

Outline:
1. Introduction to scheduling
2. Single processor problems
3. Sequence Dependent Processing Times – TSP, VRP
4. Parallel processor problems
5. Flow Shop scheduling
6. Job Shop scheduling
7. Lot Scheduling problems

Work Load:
1. Homeworks, cases, term project: 30%
2. Midterm: 30%
3. Final: 40%

Conduct:
1. The material and correspondence will be conveyed through **ODTUClass**
2. **Attendance is required and monitored.** *(at least 70% attendance is required to take the final exam)*
3. **Academic Integrity Guide for Students of METU** should be respected.
4. Makeups for the exams will be given after the final exam and will be comprehensive

The following chapters of the texts are suggested for your study:

[1] 1,2,3,4,5,8,9,10,12,13,14,16,17,Appx. C

[2] 1,2,3,4,5,6,7,14,15

GOOD LUCK!